

SITE: SANGAMO
BREAK: 13.8
OTHER: v.1



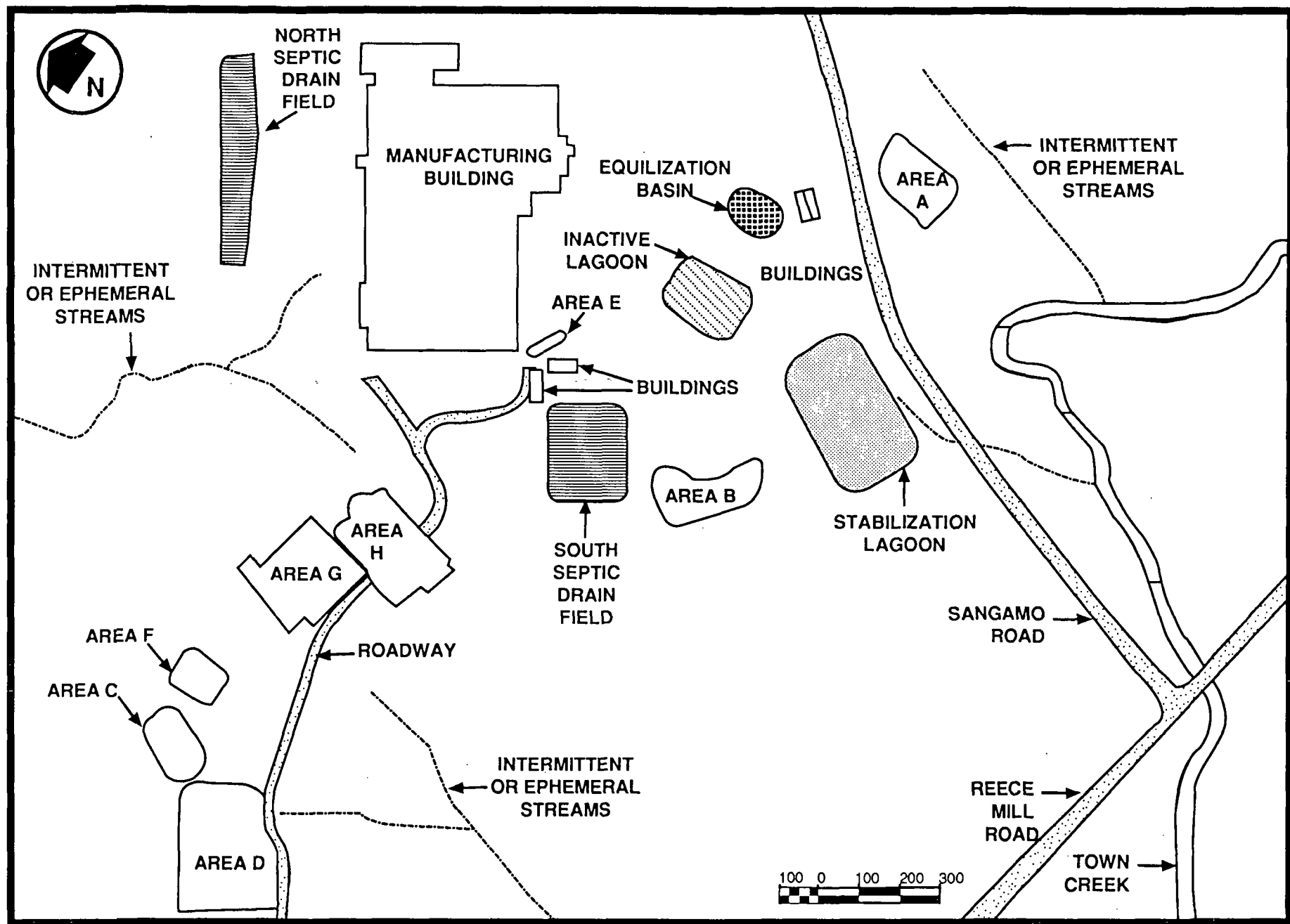
Region IV

Past Remedial Actions

- Solid Waste Removed from Nix and Dodgens Sites (1979-80)
- Sangamo Weston and EPA Signed Administrative Order on Consent (June 1987)
- Completed Phase I Remedial Investigation (1989)
- Completed Draft Feasibility Study for Presentation to Public (1990)



10729278



SANGAMO WESTON PLANT SITE REMEDIAL INVESTIGATION AREAS



Region IV

Remedial Investigation Findings at Sangamo Weston Plant Site

- **Total Estimated Volume of Waste Contained Within Plant Site Is 28,650 Cubic Yards**
- **Principal Waste Types Include:**
 - **Aluminum Hydroxide Sludge**
 - **Capacitor Debris**
 - **Contaminated Soil**
 - **Solvents**



Region IV

Remedial Investigation Findings at Sangamo Weston Plant Site (Continued)

- **Principal Constituents Found as a Result of Testing Are:**
 - **PCBs**
 - **Volatile Organic Compounds**
- **Volatile Organic Compounds Detected in Groundwater**
- **PCBs Detected in Groundwater at:**
 - **Wastewater Treatment Facility**
 - **Area G**
 - **Area B**



Region IV

Remedial Investigation Findings at the Breazeale Site

- **Estimated Volume of Waste Exceeds 2500 Cubic Yards in Each Trench**
- **PCBs Are Principal Constituents in Waste**
- **Volatile Organic Compounds Detected in Groundwater**
- **No PCBs Detected in Groundwater**



Region IV

Remedial Investigation Findings at the Nix Site

- **Estimated Volume of Waste Is 20 Cubic Yards**
- **Principal Waste Types Are:**
 - **Capacitor Debris**
 - **Contaminated Soil**
- **PCBs Are Principal Constituents in Waste**
- **PCBs Are Not Present in Groundwater**



Region IV

Remedial Investigation Findings at the Dodgens Site

- **Estimated Volume of Waste Is 100 Cubic Yards**
- **Principal Waste Types Include:**
 - **Capacitor Debris**
 - **Contaminated Soil**
- **PCBs Are Principal Constituents of Waste**
- **Volatile and Semi-Volatile Compounds Detected in Groundwater**
- **PCBs Are Not Present in Groundwater**



Region IV

Remedial Investigation Findings at the Cross Roads Site

- **Estimated Volume of Waste Is 400 Cubic Yards**
- **Principal Waste Types Include:**
 - **Capacitor Debris**
- **Principal Constituents of Waste Are:**
 - **PCBs**
 - **Volatile Organic Compounds**
- **PCBs Are Not Present in Groundwater**
- **Small Amounts of Volatile Organic Compounds
in Groundwater**



Region IV

Remedial Investigation Findings at the John Trotter Site

- **Estimated Volume of Waste Is 100 Cubic Yards**
- **Principal Waste Types Include:**
 - **Capacitor Debris**
 - **Contaminated Soil**
- **Principal Constituents of Waste Are:**
 - **PCBs**
 - **Volatile Organic Compounds**
- **PCBs and Volatile Organic Compounds Not Present in Groundwater**



Region IV

Remedial Investigation Findings at the Welborn Site

- **Estimated Volume of Waste Is 300 Cubic Yards**
- **Principal Waste Types Include:**
 - **Capacitor Debris**
 - **Contaminated Soil**
- **Principal Constituents of Waste Are PCBs**
- **One Volatile Organic Compound Detected
at One Groundwater Sampling Location**
- **PCBs Are Not Present in Groundwater**



Region IV

Evaluation of Remedial Alternatives

- **Overall Protection of Human Health and the Environment,**
- **Compliance with Applicable or Relevant and Appropriate Requirements (ARARs),**
- **Long-Term Effectiveness and Permanence,**



Region IV

Evaluation of Remedial Alternatives (Continued)

- **Reduction of Toxicity, Mobility, and Volume,**
- **Short-Term Effectiveness,**
- **Implementability,**
- **Acceptance by the State,**
- **Acceptance by the Community, and**
- **Cost**

SUMMARY OF REMEDIAL ALTERNATIVES

Those Which:

1. Require No Action

→ **2. Require Little or No Treatment and Restrict Ground Water Use**

→ **3. Minimize Need for Long-term Management and Restrict Ground Water Use**

SUMMARY OF REMEDIAL ALTERNATIVES - Cont'd

Those Which:

- 4. Include Treatment, Require Long-term Management, and Restrict Ground Water Use**
- 5. Minimize Need for Long-term Treatment, and Require Ground Water Treatment**
- 6. Require Long-term Management and Ground Water Treatment**





Region IV

2. Alternatives Involving Little or No Treatment

Alternative 2 • Implement Institutional Controls

Alternative 3 • Contain Solids

Alternative 4 • Contain Soils and Sludge:
Dispose of Wastes Off-Site

Alternative 5 • Dispose of Solids On-Site

Alternative 6 • Dispose of Solids Off-Site

(All of These Restrict the Use of Groundwater)



Region IV

3. Alternatives That Minimize the Need for Long-Term Management

***Alternative 8* • Treat and Dispose of Solids On-Site**

***Alternative 10* • Treat and Dispose of Solids Off-Site**

(These Restrict the Use of Groundwater)



Region IV

Treatment Technology Options

- **Thermal Destruction**
- **Thermal Separation**
- **Glycolate Dechlorination**
- **Stabilization/Solidification**



Region IV

4. Alternative That Includes Treatment and Requires Long-Term Management

- Alternative 13*** • Excavate and Treat Active and Inactive Lagoon Sludge
- Restrict the Use of Groundwater



Region IV

5. Alternatives That Minimize the Need for Long-Term Treatment

- Alternative 7 • Dispose of Solids On-Site:
Treat Groundwater**
- Alternative 11 • Treat and Dispose of Solids On-Site:
Treat Groundwater**
- Alternative 12 • Treat and Dispose of Solids Off-Site:
Treat Groundwater**

**(These Alternatives All Include
Extraction and Treatment of Groundwater)**



Region IV

6. Alternative That Requires Long-Term Management

- Alternative 9***
- Limited Action on Soils
 - Treat Soil *In-Situ*
 - Treat and Dispose of Solid Wastes Off-Site
 - Treat and Dispose of Sludge On-Site